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## SEP 2 5 2006

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

#### **Listing of Claims:**

Claim 1 (previously presented): A single-gated thin film transistor used in a liquid crystal display device, comprising:

- a transparent homogeneous base substrate;
- a gate electrode made of metallic material, the gate electrode being disposed in the transparent homogeneous base substrate;
- a gate insulation layer disposed on the transparent homogeneous base substrate and gate electrode;
  - a channel layer disposed on the gate insulation layer;
- a source ohmic contact layer and a drain ohmic contact layer arranged on opposite ends of the channel layer;
- a source electrode disposed on the transparent homogeneous base substrate and source ohmic contact layer; and
- a drain electrode disposed on the transparent homogeneous base substrate and drain ohmic contact layer.

Claim 2 (previously presented): The single-gated thin film transistor of claim 1, wherein the surface of the gate electrode is parallel with the surface of the transparent homogeneous base substrate.

### Claim 3 (canceled)

Claim 4 (previously presented): The single-gated thin film transistor of claim 1, wherein the gate electrode comprises Cu, Al, Ti, Mo, Cr, Ta,

Nd, or any alloy thereof.

Claim 5 (previously presented): The single-gated thin film transistor of claim 1, wherein a cross-section of the gate electrode is trapezoidal.

Claim 6 (previously presented): The single-gated thin film transistor of claim 1, wherein a cross-section of the gate electrode is rectangular.

Claim 7 (previously presented): The single-gated thin film transistor of claim 1, wherein the transparent homogeneous base substrate is made of glass or silicon oxide.

Claim 8 (previously presented): The single-gated thin film transistor of claim 1, wherein the gate insulation layer is made of silicon nitride or silicon oxide.

Claim 9 (previously presented): The single-gated thin film transistor of claim 1, wherein the channel layer is made of amorphous silicon or polycrystalline silicon.

Claim 10 (previously presented): The single-gated thin film transistor of claim 9, wherein the source and drain ohmic contact layers are formed by doping the channel layer.

Claim 11-20 (canceled)

Claim 21 (previously presented): A single-gated thin film transistor, comprising:

a homogeneous base substrate defining a cavity in an upper face thereof;

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a gate electrode filled in said cavity, said gate electrode being made of metallic material;

- a gate insulation layer applied upon said homogeneous base substrate covering both said homogeneous base substrate and said gate electrode;
- a channel layer applied upon said gate insulation layer and only covering a central portion of an upper face of said gate insulation layer;

a source electrode disposed upon one side of said channel layer and further covering a portion of said gate insulation layer wherein said portion is exposed to an exterior before said source electrode is applied thereto; and

a drain electrode disposed upon the other side of said channel layer and further covering another portion of said gate insulation layer wherein said another portion is exposed to the exterior before said drain electrode is applied thereto.

Claim 22 (previously presented): The single-gated thin film transistor of claim 1, wherein the gate electrode controls the thin film transistor to switch on or off.

Claims 23-25 (canceled)

Claim 26 (previously presented): The single-gated thin film transistor of claim 21, wherein the gate electrode controls the thin film transistor to switch on or off.

Claims 27-28 (canceled)